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INTERNATIONAL BULLETIN

OF

PLANT PROTECTION

DISCOVERIES AND CURRENT EVENTS IN WORLD PHYTOPATHOLOGY *

Italy : Phytopathological Notes (1).

During November 1927 a deterioration was noted in pears (var. "Passe-Crassane") both whilst on the tree and in store, produced by *Macrosporium epicarpium* McAlp., which was found in Southern Australia and very probably in its young form corresponds to *M. Sydorwianum* Farneti.

Phyllosticta Briardi Sacc. hitherto found in France was determined on apple leaves.

Holland : Sugar Beets and Mangolds attacked by *Phoma Betae* (2).

Phoma Betae (*Mycosphaerella tabifica*) is the chief agent in Holland of the "pied noir" disease of sugar beets and mangolds. It not only attacks the seedlings whose root it first blackens and then kills, but it is also equally found on the leaves of older plants and on the inflorescences and seed clusters. The fungus does the most harm when it kills the young plants, whose infection is brought about by the spores coming from the pycnidia found on the seed clusters. Possibly the disease can be effectively controlled by seed disinfection.

Among chemical prophylactic products "Germisan", "Tillantín" and "Agfa Saatbeize" have proved the most successful. The seed is steeped for 2 hours in a 0.5 % solution or for 4 hours in a 0.25 % solution of these disinfectants.

Treatment of seed with dry disinfectants often produces a better germination, but the disinfection obtained is undoubtedly insufficient and many young plants still die. Trial has been made of "Betanal", "Abavit B", "Tutan" and "Uspulun".

* In this, as in the two following chapters, the countries are arranged in the French alphabetical order.

(1) Communication from the "R. Osservatorio di Fitopatologia" of Turin, forwarded by the "R. Stazione di Patologia vegetale" of Rome, official correspondent to the Institute.

(2) Communication from the State Phytopathological Service at Wageningen, official correspondent to the Institute.

The disinfection of large quantities of seed clusters can be carried out in installations specially arranged for that purpose, where the seed is steeped for 3 hours in 0.25 % solution of copper sulphate at 43°C. This method is already applied by different sugar factories, who thus supply disinfected seed to the growers.

Pythium de Baryanum, *Aphanomyces laevis*, as well as the beetle *Atomaria linearis* and Nematodes attack the older roots, producing symptoms identical with those of the disease caused by *Phoma Betae*. Care must therefore be taken to avoid error in diagnosis.

Switzerland : A New Red Clover Disease (1).

Bare patches in the clover plots appeared in the spring of 1927 on the experimental field at Strickhof (Canton of Zurich). The phenomenon was also noticeable in lesser degree at other places. The plant (*Trifolium pratense*) had died or decayed, or the sickness had spread inwards at the collet. In the decayed tissues were found Nematodes, and the diseased tissues developed mycelium and conidia of *Fusarium Trifolii* Jacz. in the moist chamber after 2-3 days. The vascular bundles of the discoloured clover root tissues also shewed noticeable fungus filaments and were partly blocked.

The fungus grows very well on malt agar. Clover plants inoculated with a pure culture of the fungus died after some weeks as a result of the deterioration of tissues referred to above, while control stems on the same stock remained healthy. No Nematodes were visible : they were the cause of an obvious spread and widening of the disease in the field over neighbouring plants, while the disease itself is a fusariosis.

During the summer slightly diseased plants recovered.

This wilt was known hitherto through JACZEWSKI only from Russia, where he says it is spreading considerably.

Switzerland : Occurrence of Wart Disease in the Year 1927 (1).

Wart disease (*Synchytrium endobioticum* [Schilb.] Perc.) only appeared this year in one place. Nearly all the plants were attacked over an area of 1 are (approx. 4 rods) in a garden at Langenthal (Canton of Berne).

The commune of Au (Canton of St. Gallen) farms cooperatively with the neighbouring commune of Lustenau (Vorarlberg) land in the territory of the latter. As the result of the occurrence of wart disease here diseased potatoes reached Au.

(1) Communication from the official correspondent to the Institute, Dr. E. NEUWEILER, Swiss Agricultural Experimental Station, Oerlikon-Zurich.

In both cases the seed of the potatoes in question had been chosen from commercial table potatoes. By the immediate treatment with steam of the potato crop and by laying down the infected ground to grass for 10 years the wart disease is eliminated. At the places, where in both previous years the first outbreak of wart disease in Switzerland had arisen there was no further occurrence of the disease as a result of the radical control measures taken.

VARIOUS QUESTIONS RELATING TO PLANT PROTECTION IN THE DIFFERENT COUNTRIES

Algeria : Flights of Migratory Locusts during the Month of November, 1927 (1).

The information collected in the course of the month of November, 1927 confirms the possibility of invasion of North Africa next spring by migratory locusts, which have been definitely identified as *Acridium peregrinum*. Most of the specimens received are pink coloured.

4 November. — The "Annexe" of Ouargla reports flights of migratory locusts at Erg Megraoun, to the South of Inifel, at 300 km. S. S. W. of the post and at Hassi Guifida at 80 km. S. E.

12 November. — The "Annexe" of Timinoun reports flights of migratory locusts at Gougirout and at Hassi Joyeux respectively, at 30 and 27 km. South of the post.

16 November. — Flights of very slight density reported at Tiznit and Taroudant, 30 km. S. E. of Agadir, Morocco.

17 November. — Beni-Abbès reports flights of migratory locusts and a great number of isolated locusts in the region of La Saoura and towards the West as far as Tabelballa.

19 November. — The head of the "Annexe" of Timinoun reports that migratory locusts have broken their flight at 20 km. S. E. of the post at places called Aouguerout Oued Hamouzine and at 10 km. S. E. in Oued Morkda. Some locusts have attacked the palm groves of Dacardat.

21 November. — Unimportant flights of migratory locusts have alighted near the Oasis of El-Goléa, then have left again flying towards the North-West.

(1) Communication from the Governor General of Algeria to the President of the International Institute of Agriculture.

22 November. — Flights of migratory locusts, of slight importance, reported in the neighbourhood of Ouargla at the place called Ain Beida travelling northwards.

25 November. — Flights of migratory locusts, without importance, reported in the "Annexe" of Touggourt at Maggarin Hassi Daoula.

Canada : Efforts to Control *Puccinia graminis Tritici* and *P. triticea* by Applications of Sulphur Dust discharged from Special Aeroplanes (1).

In preliminary experiments the results obtained proved so interesting in Western Canada, that they were continued on more extensive lines. In the dusted plots there was an increase in yield of 72 per cent as compared with check plots. The government grades of the two samples of wheat submitted were No. 1 Northern and "Feed" respectively. Owing to the generous co-operation of the Royal Canadian Air Force a specially constructed plane has been employed to dust several areas of some 1200 acres in all. The results are not yet available, but the fact has been satisfactorily established that the use of planes for this purpose is quite practicable.

Uruguay: The San José Scale, *Aspidiotus perniciosus* (2).

This scale insect, which was unknown in Uruguay until a short time ago, was identified by myself at the beginning of 1922, when I discovered it as a parasite of plums coming from an orchard near the capital of the Department of Treinta y Tres.

It has not been possible to determine either the date of the accidental introduction of *Aspidiotus perniciosus* Comst. into Uruguay or its source of origin; it may however be supposed that this scale insect had been in existence there several years before its actual identification, seeing that it is very widely spread and to be found on apples, plums and peaches in the orchard to which reference has been made.

The best means of control has been found to be constant spraying during the winter of the infected plants with a lime sulphur spray at a concentration of 25° Baumé in a 15-20 % aqueous solution. During the spring months and the summer similar sprayings should be employed but with a 5 % solution.

The use of this insecticide freed the fruit trees from a large number of these pests.

In 1922 the Director of Agriculture, Señor Roberto SUNDBERG requested Dr. L. O. HOWARD, Chief of the Bureau of Entomology in Washing-

(1) Communication from the official correspondent to the Institute, Mr. H. T. Güssow, Dominion Botanist, Central Experimental Farm, Ottawa.

(2) Communication from the official correspondent to the Institute, Sr. Agustín TRUJILLO PELUFFO, District Agricultural Officer (Sección Fomento y Defensa Agrícola de la Dirección de Agronomía), Montevideo.

ton, to send a few colonies of *Chilocorus bivulnerus* Muls., one of the natural enemies of *A. perniciosus*. As soon as the counter parasites were received, they were placed under special conditions on the scale insect affected trees in the orchard.

These natural enemies of the *Aspidiotus* according to our observations took a little while to adapt themselves to the new environment, but during recent years they have spread freely and in the summer of 1927 proved to be a quite effective means of control; we are of opinion that their beneficial action will still further increase by the further spread and propagation of *Ch. bivulnerus*.

On the occasion of my last journey to the Department of Treinta y Tres I found several hundred specimens of *Chilocorus*, which on my return I distributed among various orchards where *A. perniciosus* had made its appearance.

In the summer of 1928 the "Sección Fomento y Defensa Agrícola" of the Agricultural Department will make a fresh distribution of *Chilocorus* in order to encourage its further diffusion in Uruguay, seeing that this insect preys upon other scale insects parasitic on fruit trees, such as *Lepidosaphes beckii*, etc.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — In accordance with the Order of 29 January, 1919 (*Reichsgesetzblatt*, S. 165), regarding the control of harmful animals and plants by means of highly poisonous materials, the Minister of Agriculture ("Reichsminister für Ernährung und Landwirtschaft"), by agreement with the Minister for the Interior ("Reichsminister des Innern"), and by Order dated 22 August, 1927 to come into force on 15 September, 1927, makes the following provisions:—

(1) The use of hydrocyanic acid and of all materials serving for the development of hydrocyanic acid or easily soluble cyanic compounds for the control of harmful animals and plants (including those sorts which are scheduled as noxious) is forbidden in any form whatever. The Minister of Agriculture can by agreement with the Minister of the Interior make exceptions to this rule.

(2) The prohibition does not extend to the army, navy and scientific research stations of the Empire and of the States. The highest State Officials and their duly appointed delegates may issue permission for the use of the materials forbidden in Section (1) on request to certain other Institutes or persons.

(3) The scheduled materials may only be delivered to places specified

in Section (2) or to such Institutes or persons as possess a permit for their use. Delivery must be made in receptacles which are impermeable to hydrocyanic acid.

Infringements of these provisions will be punished by imprisonment not exceeding a year and with fines, or with one or other of these penalties.

The proclamation in pursuance of the order on the control of noxious plants and animals by means of highly poisonous materials dated 17 July, 1922 (*Reichsgesetzblatt*, I, S. 630) is hereby annulled. (*Reichsgesetzblatt*, Teil I, Berlin, 16. September 1927, Nr. 41, S. 297).

Argentina. — Decree No. 628 of 11 May, 1927 prohibits the importation from any country of the world of maize (either of the grains or of the plants in any form, including those used for packing agricultural machines, etc.) and of "maíz de Guinea" [*Sorghum vulgare*] either as grains or as dry plants used in industry.

Seeds of plants liable to attacks by "taladro del maíz" (European Corn Borer, *Pyrausta nubilalis*) may be imported by the port of Buenos Aires and, even though apparently in good sanitary condition, they must be submitted for at least four hours to thorough disinfection with maximum doses of hydrocyanic acid.

To the Decree is annexed a list of the plants which are severely attacked by *P. nubilalis* (*Cannabis sativa*, *Humulus japonicus*, *Rheum ponticum*, *Dahlia*, *Sorghum* spp., *Echinochloa Crus-galli edulis*) and of those frequently attacked (*Hordeum vulgare*, *Phaseolus* spp., *Beta vulgaris crassa*, *Apium graveolens*, *Chrysanthemum*, *Gossypium hirsutum*, *Solanum tuberosum* (except seed potatoes), *Helianthus annuus*, *H. tuberosus*, *Vigna sinensis*, *Capsicum annuum*, *Fagopyrum vulgare*, *Avena sativa*, *Spinacia oleracea*, *Lycopersicum esculentum*). (*Boletín oficial de la República Argentina*, Buenos Aires, 7 de julio de 1927, año XXXV, núm. 9967, pág. 306).

* * By Decree No. 629 of 13 May, 1927 the importation of fresh guava fruits coming from Paraguay has been prohibited. (*Boletín oficial de la República Argentina*, Buenos Aires, 7 de julio de 1927, año XXXV, núm. 9967, pág. 306).

Canada. — By order in Council, dated 18 August, 1927, No. 1609, the Governor General has issued Fruit Export Regulations, dealing with the inspection of fruit offered for export out of Canada.

No person shall export from Canada any fresh fruit (apples, pears and plums) grown in Canada unless the same has been inspected and an Export Inspection Certificate issued, signed by an Inspector, stating that such fruit complies with all requirements of the Fruit Act and is of the grade designated. (*The Canada Gazette*, Ottawa, August 27, 1927, pp. 557-558).

Chile. — The Decree No. 531 of 4 May, 1927 gives notice that the authorisation of free importation of tropical fruits (see No. 6 of this Bulletin

tin) is also extended to the port of Chañaral with the exception of bananas, pine apples and dates which may also be imported by the port of Huasco. (*Diario oficial de la República de Chile*, Santiago, 11 de mayo de 1927, año LI, núm. 14,769, pág. 1980).

Egypt. — In order to secure the destruction of the pink bollworm the Minister of Agriculture has, by Decree of 10 August, 1927, fixed for 1927 the dates before which in the Moudiriehs, Markaz and zones mentioned in the Decree the roots of cotton plants, "til" (*Hibiscus cannabinus*) and "bamia" (*H. esculentus*) must be grubbed up or cut below soil level so as to prevent further growth.

Before these dates and in the same specified areas all bolls containing seeds which have fallen to the ground must be collected and burned. (*Journal officiel du Gouvernement Egyptien*, 15 août 1927, 54^{ème} année, n° 69, p. 1).

Spain. — By Royal Order No. 159 of 24 June, 1927 the inspection of the sanitary condition and quality of the products mentioned in Royal Decree No. 832 of 29 April, 1927 (see No. 6 [1927] of this Bulletin) will be carried out at the ports and custom houses of departure.

The General Direction of Agriculture and Forestry may however, upon the request of the exporters and repayment by them of the necessary expenses, allow the inspection of vegetable products for exportation in closed and sealed packages to take place at the railway station of origin, subject to the necessary warrants.

The present Order contains further provisions regarding the constitution and methods of work of the "Juntas mixtas inspectoras" to which reference has already been made in the Royal Decree quoted above. (*Gaceta de Madrid*, Madrid, 30 junio 1927, año CCLXVI, tomo II, núm. 181, págs. 1928-1929).

* * In virtue of Royal Ordinance No. 191 of 27 August, 1927, the Agricultural Engineers belonging to the "Servicio de Fitopatología agrícola" assume the character and function of inspectors and should visit periodically, before the harvesting of the products intended for exportation, the district assigned to each of them, with the object of ascertaining the sanitary state of the immune, suspected and infected zones for exportable products. The inspectors will pay similar visits to preparing and packing establishments so as to be able to determine at any moment the health and quality conditions of the agricultural produce for exportation. These products, if coming from a zone recognized as free from diseases or pests, shall be exempted provisionally from normal inspection at ports and Land Customs Offices.

Without prejudice to their inspectorial functions, the Engineers will make, under the direction of the Phytopathological Stations, observations concerning the biology of determined but little known pests and tests of new control measures. Moreover, whenever necessary and their inspectorial functions permit, they will assist the various Agricultural

Sections in carrying out control measures against plant pests and diseases, as well as in giving information on the spot as to the most effective processes of control against such pests and diseases. (*Gaceta de Madrid*, Madrid, 1 septiembre 1927, año CCLXVI, tomo III, núm. 244, págs. 1294-1295).

French Settlements in India. — By virtue of the Decree of the Minister for the Colonies of 1 August, 1927, in the French Settlements in India and Oceania the importation by sea, movement, storing and transit of coconut plants, coconuts, coconut leaves and all materials that may contain the parasites which attack this palm are prohibited. (*Journal officiel de la République Française*, Paris, 7 août 1927, 59^{ème} année, n° 183, p. 8467).

French Settlements in Oceania. — See French Settlements in India.

Iraq. — "The Locusts Campaign Law No. 56 of 1927" of 8 June, 1927, published in the *Waqayi' al'Iraqiya*, No. 553, of 15.6.27, cancels all previous Laws in regard to the combat of locusts.

It defines the meanings of Administrative Official, Mukhtar, Locust Campaign Measures and Means of Combat.

It authorizes the Government to employ persons residing in or near lands infested with locusts for combatting the same and to collect and use all necessary means for combatting locusts, for which payment at rates framed by the Majlis al Idara shall be made in the manner prescribed by the Administrative Official.

The Administrative Official shall determine the numbers of the personnel and of the ploughing tackle, transport and other gear necessary and shall apportion them, giving a register thereof to the Mukhtar, who shall then be responsible for supplying them. They shall be under the orders of the Administrative Official and any person refusing to comply with these provisions shall be subject to a fine not exceeding Rs 250 and imprisonment not exceeding 2 months or both.

The same penalty shall be imposed on any landowner, occupier, multazim, tribal Shaikh or Sirkal of a land who does not, on receipt of information as to the existence of locusts or locusts eggs, immediately report this to the nearest Administrative Official.

The Department concerned shall prepare in advance and communicate to the Administrative Official the plan of campaign and the means of combat required.

The Ministers of Interior and Irrigation and Agriculture are charged with the execution of this Law. (*Iraq Government Gazette*, Baghdad, 18 June, 1927, No. 25, pp. 231-232).

Italy. — By Royal Decree No. 1925 of 12 August, 1927 modifications and additions have been made to Regulation No. 1361 of 1 July, 1926 for giving effect to Royal Decree No. 2033 of 15 October, 1925, which deals

with the suppression of fraud in the preparation of and dealings in materials used in agriculture and agricultural products.

Inter alia the following is substituted for art. 30: "As regards sulphurs, refined or raw, the quality of the product must be stated — ground raw sulphur, ground refined sulphur, ventilated refined sulphur ("zolfo greggio molito", "zolfo raffinato molito", "zolfo raffinato ventilato") — as well as the purity and fineness, it being understood that the last is determined by the Chancel tube.

"Mineral sulphur containing less than 25 % of sulphur must not be marketed as a fungicide. The quality and purity of the product must always be stated". (*Gazzetta ufficiale del Regno d'Italia*, Roma, 27 ottobre 1927, anno 68°, n. 249, pp. 4194-4195).

* * * As a result of the presence of grape phylloxera [*Phylloxera vastatrix*] being determined in the Communes of Besana in Brianza (Province of Milan), of Cissone (Province of Cuneo), of Collepietro (Province of Aquila degli Abruzzi) and of Agugliano (Province of Ancona), Decrees dated 8 October, 1927 have extended to the territory of the above Communes the rules contained in arts. 10-14 of Regulation No. 1099 of 13 June, 1918, with regard to the exportation of such materials as are indicated in nos. 1, 2, 3 and 4 of art. 10 of the same Regulation. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 11 ottobre 1927, anno 68°, n. 235, p. 4052).

* * * Following the presence of grape phylloxera [*Phylloxera vastatrix*] which has been determined in the Commune of Mosciano Sant'Angelo (Province of Teramo), a Decree dated 14 October, 1927 has extended to the above Commune the rules contained in arts. 10-14 of Regulation No. 1099 of 13 June, 1918, relating to the exportation of such materials as are indicated in nos. 1, 2, 3 and 4 of art. 10 of the same Regulation. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 19 ottobre 1927, anno 68°, n. 242, p. 4115).

* * * As a result of the presence of grape phylloxera [*Phylloxera vastatrix*] which has been determined in the Communes of Calderara di Reno, Savignano, Castelfranco dell'Emilia, Bentivoglio (Province of Bologna), Giulianova, Bellante and Torano Nuovo (Province of Teramo), Ministerial Decrees of 5 November, 1927 have extended to these Communes the rules contained in arts. 10-14 of Regulation No. 1099 of 13 June, 1918 relating to the exportation of such materials as are indicated in nos. 1, 2, 3 and 4 of art. 10 of the same Regulation. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 10 novembre 1927, anno 68°, n. 260, p. 4386).

* * * Ministerial Decree of 7 November, 1927 has declared the Communes of Castelvetro, Modena, Novi di Modena and Guiglia in the Province of Modena infected with grape phylloxera [*Phylloxera vastatrix*]. In consequence the rules contained in arts. 10-14 of Regulation No. 1099 of 13 June, 1918 relating to the exportation of such materials as are indicated in nos. 1, 2, 3 and 4 of art. 10 of the same Regulation become appli-

cable to these Communes. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 12 novembre 1927, anno 68^o, n. 262, p. 4419).

Morocco. — A Decree of the Director General of Agriculture, of Commerce and of Colonisation dated 22 June, 1927 has determined the plant parasites for whose destruction relaxations may be accorded in the ruling of Para. 5 of Art. 1 of the "dahir" of 13 July, 1926.

These parasites are *Sesamia nonagrioides* and *Mayetiola destructor*.

By the terms of this Decree the local control authorities may authorize, on the recommendation of the Inspector of Agriculture, the firing of the stubble invaded by one or the other of these parasites, whatever their position may be as regards crops or plantations, grounds covered with sheaves, shocks and hay, stacks, clumps of undergrowth or stubble fields. Those concerned must scrupulously observe the special precautions prescribed by the control authorities. Authorizations for firing the stubble in other cases are also issued by the local Control Authorities. (*Feuille de Renseignements de la Direction Générale de l'Agriculture, du Commerce et de la Colonisation du Maroc*, Rabat, 1927, 8^e année, n^o 91, p. 147).

Mauritius. — By Proclamation of the Governor of Mauritius, No. 26 of 14 June, 1927, it is enacted that, whereas by Proclamation No. 4 of 1919 the Crown Lands of the Colony, including the Pas Géométriques as defined by arts. 2, 3 and 4 of Ordinance No. 19 of 1895, have been declared infected or suspected of infection by a fungus provisionally identified as belonging to the genus *Trichosporium* which attacks the roots of *Casuarina equisetifolia*, the owner or occupier of any such land shall carry out such written orders as may be issued by the Director of Forests for the treatment of the disease and shall cut down, remove or destroy any *Casuarina equisetifolia* which may be or may become affected with such disease, if so ordered by the Director of Forests. (*The Government Gazette of the Island of Mauritius*, No. 34 Extraordinary, 15 June, 1927, pp. 241-242).

Mexico. — To avoid the introduction of certain cryptogamic diseases of rice the Decree of 12 May, 1927 prohibited the importation into the Republic of rice and paddy from any foreign country with the exception of the United States of America.

At the same time the introduction of these products for purposes of study with the previous consent of the "Secretaría de Agricultura y Fomento" is permitted. Any rice illegally imported will be destroyed. (*Diario oficial*, México, 11 de junio de 1927, tomo XLIII, núm. 34, págs. 5 y 6).

* * By the provisions of the Decree of 16 June, 1927 the importation of potatoes into the Republic is only permitted on condition that the country of origin is shown to be free from wart disease ("verruca

de la papa", *Chrysophlyctis endobiotica* [= *Synchytrium endobioticum*]) and from other diseases and pests of the potato and that the introduction of potatoes into that country from every other State attacked by those diseases and pests is prohibited.

Persons proposing to import potatoes into Mexico must provide themselves with a special permit issued by the "Oficina para la Defensa Agrícola"; in addition the goods shall be accompanied by a certificate in due legal form issued by the competent authorities of the country of origin, attesting *inter alia* that the potatoes come from a district free from wart disease and also by a consular certificate indicating that in the country of origin quarantines exist to prevent the introduction of potatoes from other countries affected by diseases or pests of the plant in question.

The arrival of the cargo must be notified to the "Secretaría de Agricultura y Fomento"; its unloading will be carried out only at the port indicated in the permit with which the importer must be provided, and always on condition that the captain of the ship certifies that the cargo has not been transshipped or that, in the event of transshipment at the harbour of a country under quarantine, it was carried out without the goods touching the land.

With the exception of goods loaded in bulk, potatoes must be packed in receptacles or packing cases which have not previously been used for carrying potatoes.

The cargo will be examined at the port of arrival by an inspector of the "Oficina", who will, in the case of infected goods, forbid their introduction unless the "Secretaría" considers that disinfection or fumigation would suffice to prevent the spread of a given disease or pest, in which case the necessary treatment will be undertaken.

The cost of storing, transport, fumigation or disinfection, etc., arising from inspection at the port of destination will be charged to the consignee.

Potatoes coming from the district of the United States of America which lies south of the line joining the District of Columbia with the State of Florida, including the States of California, Colorado, Tennessee, Virginia, North Carolina, South Carolina, Texas and Florida, may only be introduced into Mexico when previously subjected to disinfection or fumigation, this zone being infested by the potato moth ("palomilla de la papa", *Phthorimaea operculella*). (*Diario oficial*, México, 11 de julio de 1927, tomo XLIII, núm. 9, págs. 8 y 9).

Italian Somaliland. — By Decree No. 6165 of the Governor of 10 August, 1927 the importation by private persons of sugar cane cuttings has been prohibited in order to prevent the spread of crop pests and diseases in the Colony. (*Bollettino ufficiale della Somalia Italiana*, Mogadiscio, 31 agosto 1927, vol. XVII, n. 8, p. 358).

Union of South Africa (1). — By Proclamation No. 259 of 1927, given by the Governor General 12 September, 1927, citrus fruits in their fresh state including all varieties, except citrus fruits grown in Portuguese East Africa, are added to the list of plants, which under sub-section (1) of section 9 of the Agricultural Pests Act, 1911 (Act No. 11 of 1911), no person shall introduce or cause to be introduced from overseas into the Union. This Proclamation takes effect as from 1 September, 1927.

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(1) Communication from the official correspondent to the Institute, Dr. E. DODGE, Chief Division of Botany, Horticulture and Entomology, Pretoria.

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